Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Tripterin

Catalog No: tcsc0409

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
34157-83-0

Formula:
$C_{29}H_{38}O_4$

Pathway:
Metabolic Enzyme/Protease;Autophagy;Autophagy

Target:
Proteasome;Autophagy;Mitophagy

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 50 mg/mL (110.96 mM)

Alternative Names:
Celastrol

Observed Molecular Weight:
450.61

Product Description

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Tripterin (Celastrol) is a **proteasome** inhibitor which potently and preferentially inhibits the chymotrypsin-like activity of a purified **20S proteasome** with **IC_{50}** of 2.5 μM.

IC50 & Target: IC50: 2.5 μM (20S proteasome)[1]

In Vitro: Tripterin (Celastrol) significantly inhibits the proteasomal chymotrypsin activity in PC-3 cells in a concentration-dependent manner; at 2.5 μM it reaches ~55% inhibition, comparable to its potency to a purified 20S proteasome (IC_{50}=2.5 μM). Furthermore, increased levels of IκB-α, Bax, and p27 are observed, three well known target proteins of the proteasome in PC-3 cells treated with Celastrol[1].

In Vivo: Treatment of PC-3 tumor-bearing nude mice with Tripterin (Celastrol) (1-3 mg/kg/d, i.p., 1-31 days) results in significant inhibition (65-93%) of the tumor growth[1]. Following treatment with 3 and 6 mg/kg Tripterin (Celastrol), the levels of malondialdehyde (MDA) are significantly decreased by 35.2 and 36.7% (P[2].